

ABSTRACT OF THE DISCLOSURE

A perforating gun assembly for use in a subterranean well incorporates therein an electromagnetic frequency receiver coupled to a motor section which, in turn, is coupled to the mechanically actuatable firing head portion of the perforating gun. The assembly is lowered into a cased wellbore to a subterranean formation location, and a surface-disposed transmitter generates encoded electromagnetic waves through the earth to the receiver. Upon sensing in the received waves a predetermined frequency and embedded firing code, the receiver electrically operates the motor which, in turn, mechanically actuates the firing head to initiate the firing of the perforating gun. While the assembly is illustratively lowered into the wellbore on a tubing structure, a variety of non-tubing structures may be alternatively utilized to lower the gun assembly into the wellbore and operatively support it therein.